Summary of Water Conditions

March 1, 2013

After a wet start in the early part of the winter, this water year switched into a very dry mode which continues at this time. But this one has seen record breaking low rain and snowfall amounts in the two month January and February period in much of northern and central California. The northern Sierra 8 station precipitation two month total was only 2.3 inches, about 14 percent of the average of 17 inches, and quite a bit less than the 4 inches in 1991. The Sierra snowpack, which seemed so promising in early January, is still nearly unchanged at just over half of the average April 1 accumulation. Streamflow was far below normal for both months. Thanks to early season storms, reservoir storage overall is about average for this date. The storage, along with spring runoff from the smaller snowpack, will probably be enough, with careful management, to take care of most northern California water needs this year. The outlook is worse for the southern San Joaquin Valley, including farms served by Delta export supplies. About one fourth of the rainy season remains and the outlook could still change with favorable spring weather.

Forecasts of median April through July runoff are 65 percent of average for this date compared to only 40 percent forecasted last year on March 1. Water year runoff is projected to be 70 percent of average, lowest at 50 percent in Tulare Lake region.

Snowpack water content is about 60 percent of average for this date. This compares to a very poor 30 percent one year ago. The pack is about 55 percent of the April 1 average, normally the time of maximum accumulation. The March 1 percentage range is small, from just under 60 to about 70 on the Sierra east side.

Precipitation from October through February is about 80 percent of average statewide, a decrease of 20 percent during a dry February which produced only about 15 percent for the month. The range is from 95 percent in the north to 35 percent in the South Lahontan region. Last year precipitation stood at only 50 percent on March 1.

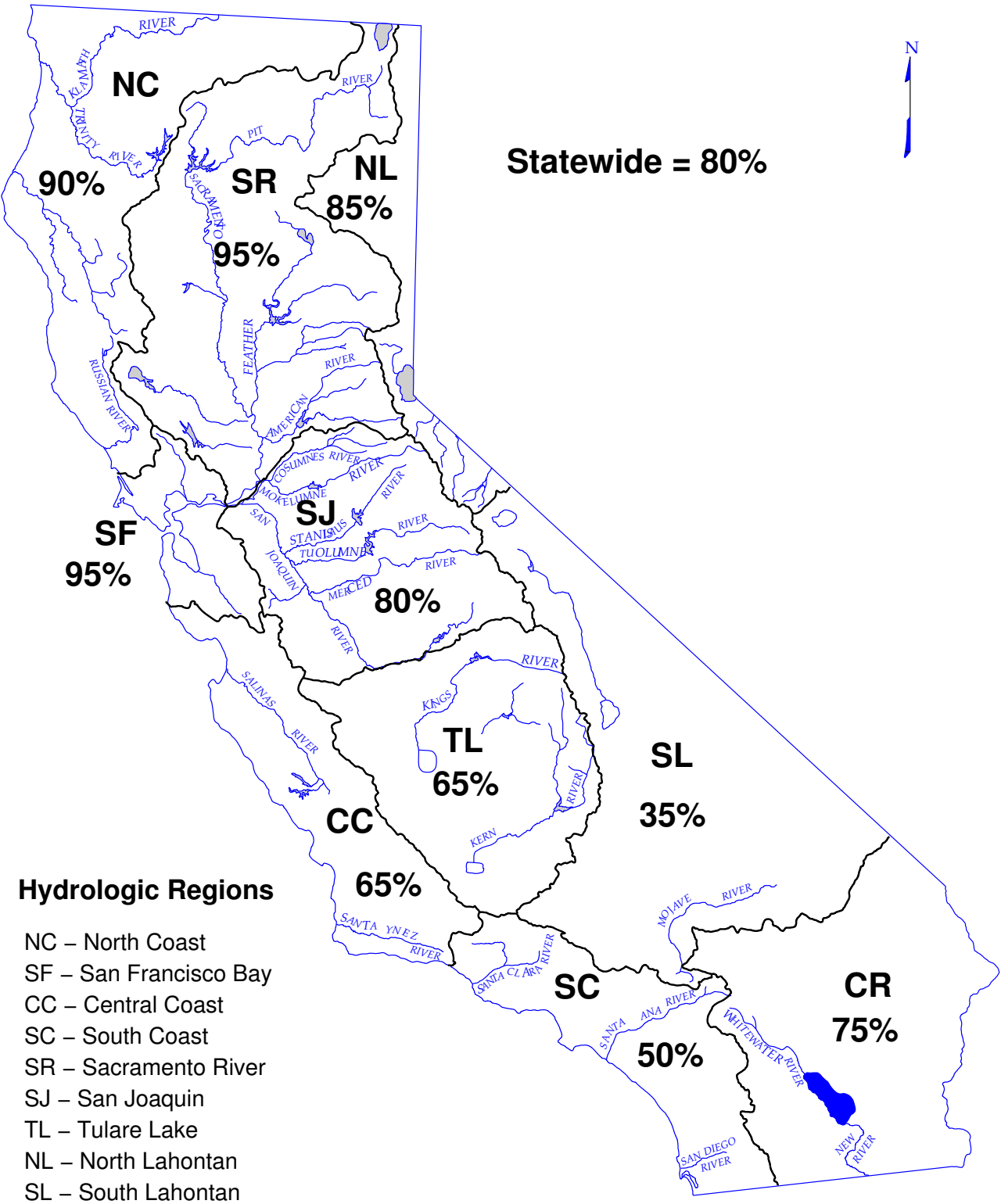
Runoff so far has been 80 percent of average; last year had only produced 35 percent at this time. Estimated runoff of the eight major rivers of the Sacramento-San Joaquin River region in February was 1.08 million acre-feet.

Reservoir storage is about average, 100 percent, a bit less than the 105 percent one year ago. San Luis and the bigger Tulare Lake region reservoirs are seriously lagging.

SUMMARY OF WATER CONDITIONS
IN PERCENT OF AVERAGE

HYDROLOGIC REGION	PRECIPITATION OCTOBER 1 TO DATE	MARCH 1 SNOW WATER CONTENT	MARCH 1 RESERVOIR STORAGE	RUNOFF OCTOBER 1 TO DATE	APR-JULY RUNOFF FORECAST	WATER YEAR RUNOFF FORECAST
NORTH COAST	90	60	105	75	65	70
SAN FRANCISCO BAY	95	--	90	95	--	--
CENTRAL COAST	65	--	85	55	--	--
SOUTH COAST	50	--	85	25	--	--
SACRAMENTO RIVER	95	60	110	85	65	75
SAN JOAQUIN RIVER	80	65	95	75	65	65
TULARE LAKE	65	60	65	50	55	50
NORTH LAHONTAN	85	70	105	80	60	60
SOUTH LAHONTAN	35	70	95	100	55	70
COLORADO RIVER-DESERT	75	--	--	--	--	--
STATEWIDE	80	60	100	80	65	70

DEPARTMENT OF WATER RESOURCES
CALIFORNIA COOPERATIVE SNOW SURVEYS
SEASONAL PRECIPITATION
IN PERCENT OF AVERAGE TO DATE
October 1, 2012 through February 28, 2013

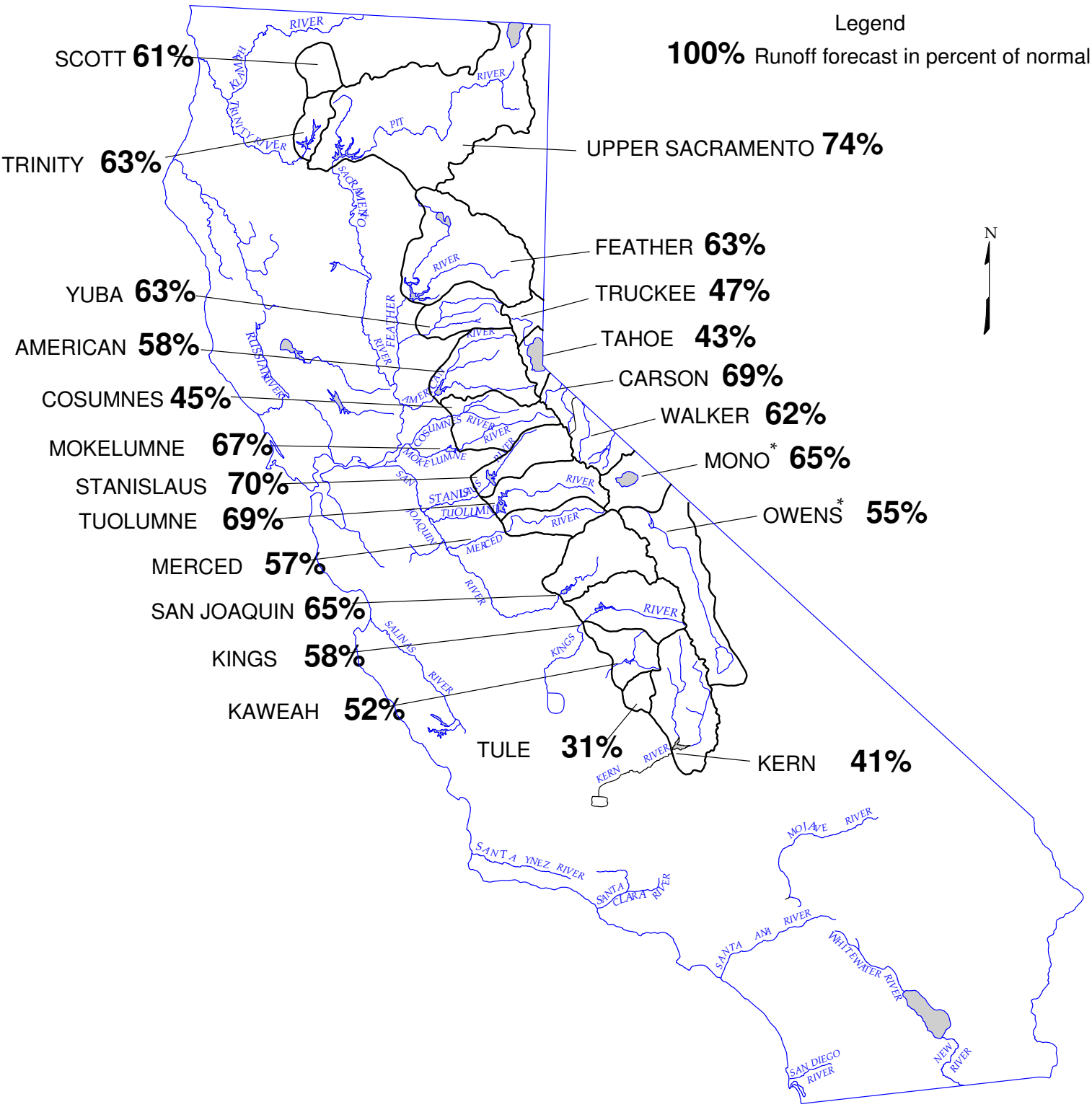


Hydrologic Regions

NC – North Coast
SF – San Francisco Bay
CC – Central Coast
SC – South Coast
SR – Sacramento River
SJ – San Joaquin
TL – Tulare Lake
NL – North Lahontan
SL – South Lahontan
CR – Colorado River–Desert

WATER YEAR IS OCTOBER 1 THROUGH SEPTEMBER 30

DEPARTMENT OF WATER RESOURCES
CALIFORNIA COOPERATIVE SNOW SURVEYS
FORECAST OF APRIL – JULY
UNIMPAIRED SNOWMELT RUNOFF
March 1, 2013



* FORECAST BY DEPARTMENT OF WATER AND POWER, CITY OF LOS ANGELES

MARCH 1, 2013 FORECASTS
APRIL-JULY UNIMPAIRED RUNOFF

HYDROLOGIC REGION and Watershed	Unimpaired Runoff in 1,000 Acre-Feet (1) HISTORICAL 50 Yr Avg (2)	Max of Record	Min of Record	FORECAST Apr-Jul Forecasts	Pct of Avg	80 % Probability Range (1)
North Coast						
Trinity River at Lewiston Lake	651	1,593	80	**410**	63%	240 - 800
SACRAMENTO RIVER						
Upper Sacramento River						
Sacramento River at Delta above Shasta Lake	302	711	39	180	60%	
McCloud River above Shasta Lake	392	850	185	310	79%	
Pit River near Montgomery Creek + Squaw Creek	1,046	2,098	480	830	79%	
Total Inflow to Shasta Lake	1,806	3,525	726	**1,340**	74%	900 - 2,240
Sacramento River above Bend Bridge, near Red Bluff	2,485	5,075	943	**1,800**	72%	1,170 - 3,230
Feather River						
Feather River at Lake Almanor near Prattville (3)	333	675	120	220	66%	
North Fork at Pulga (3)	1,028	2,416	243	630	61%	
Middle Fork near Clio (4)	86	518	4	45	52%	
South Fork at Ponderosa Dam (3)	110	267	13	60	55%	
Feather River at Oroville	1,758	4,676	392	**1,110**	63%	510 - 2,260
Yuba River						
North Yuba below Goodyears Bar	279	647	51	170	61%	
Inflow to Jackson Mdws and Bowman Reservoirs (3)	112	236	25	70	63%	
South Yuba at Langs Crossing (3)	233	481	57	140	60%	
Yuba River near Smartsville plus Deer Creek	996	2,424	200	**630**	63%	270 - 1,200
American River						
North Fork at North Fork Dam (3)	262	716	43	140	53%	
Middle Fork near Auburn (3)	522	1,406	100	300	57%	
Silver Creek Below Camino Diversion Dam (3)	173	386	37	100	58%	
American River below Folsom Lake	1,231	3,074	229	**720**	58%	270 - 1,550
SAN JOAQUIN RIVER						
Cosumnes River at Michigan Bar	128	363	8	**57**	45%	13 - 205
Mokelumne River						
North Fork near West Point (5)	437	829	104	280	64%	
Total Inflow to Pardee Reservoir	461	1,065	102	**310**	67%	190 - 550
Stanislaus River						
Middle Fork below Beardsley Dam (3)	334	702	64	230	69%	
North Fork Inflow to McKays Point Dam (3)	224	503	34	150	67%	
Stanislaus River below Goodwin Reservoir (9)	699	1,710	116	**490**	70%	320 - 880
Tuolumne River						
Cherry Creek & Eleanor Creek near Hetch Hetchy	315	727	97	220	70%	
Tuolumme River near Hetch Hetchy	604	1,392	153	440	73%	
Tuolumne River below La Grange Reservoir (9)	1,221	2,682	301	**840**	69%	580 - 1,460
Merced River						
Merced River at Pohono Bridge	372	888	80	220	59%	
Merced River below Merced Falls (9)	636	1,587	123	**360**	57%	220 - 710
San Joaquin River						
San Joaquin River at Mammoth Pool (7)	1,026	2,279	235	700	68%	
Big Creek below Huntington Lake (8)	91	264	11	55	60%	
South Fork near Florence Lake (7)	201	511	58	140	70%	
San Joaquin River inflow to Millerton Lake	1,258	3,355	262	**820**	65%	540 - 1,410
TULARE LAKE						
Kings River						
North Fork Kings River near Cliff Camp (3)	239	565	50	140	59%	
Kings River below Pine Flat Reservoir	1,236	3,113	274	**720**	58%	440 - 1,310
Kaweah River below Terminus Reservoir	290	814	62	**150**	52%	90 - 330
Tule River below Lake Success	64	259	2	**20**	31%	2 - 94
Kern River						
Kern River near Kernville	384	1,203	83	170	44%	
Kern River inflow to Lake Isabella	465	1,657	84	**190**	41%	80 - 490

(1) See inside back cover for definition
(2) All 50 year averages are based on years 1961-2010 unless otherwise noted
(3) 50 year average based on years 1941-90
(4) 44 year average based on years 1936-79
(5) 36 year average based on years 1936-72
(6) 45 year average based on years 1936-81
(7) 50 year average based on years 1953-2002
(8) 50 year average based on years 1946-1995

MARCH 1, 2013 FORECASTS
WATER YEAR UNIMPAIRED RUNOFF

Unimpaired Runoff in 1,000 Acre-Feet (1)															
HISTORICAL			**DISTRIBUTION**									**FORECAST**			
50 Yr Avg (2)	Max of Record	Min of Record	Oct Thru Jan	Feb *	Mar	Apr	May	Jun	Jul	Aug	Sep	Water Year Forecasts	Pct of Avg	80 % Probability Range (1)	
1376	2990	200	344	67	120	145	165	80	20	8	5	**955**	69%	730 -	1420
876	1,965	165													
1,200	2,353	557													
3,082	5,150	1,484													
5,979	10,796	2,479	1,860	340	680	485	380	260	215	180	180	**4,580**	77%	3,795 -	6,180
8,727	17,180	3,294	2,665	470	1,000	660	535	345	260	230	225	**6,390**	73%	5,250 -	8,970
780	1,269	366													
2,417	4,400	666													
219	637	24													
291	562	32													
4,523	9,492	994	1,585	230	450	435	400	175	100	75	70	**3,520**	78%	2,590 -	5,280
564	1,056	102													
181	292	30													
379	565	98													
2,329	4,926	369	830	105	220	245	265	95	25	15	10	**1,810**	78%	1,300 -	2,600
616	1,234	66													
1,070	2,575	144													
318	705	59													
2,683	6,382	349	855	105	225	290	300	110	20	10	5	**1,920**	72%	1,330 -	3,020
385	1,253	20	97	14	32	30	20	5	2	0	0	**200**	52%	130 -	435
626	1,009	197													
751	1,800	129	140	25	60	100	145	60	5	5	0	**540**	72%	390 -	830
471	929	88													
1,167	2,952	155	195	40	95	160	210	100	20	5	5	**830**	71%	620 -	1,310
461	1,147	123													
770	1,661	258													
1,943	4,631	383	300	50	145	220	360	220	40	10	5	**1,350**	69%	1,040 -	2,090
461	1,020	92													
1,007	2,787	150	125	25	65	105	170	70	15	5	0	**580**	58%	410 -	1,000
1,337	2,964	308													
112	298	14													
248	653	71													
1,831	4,642	362	180	45	105	180	330	230	80	25	15	**1,190**	65%	850 -	1,890
284	607	58													
1,729	4,287	386	125	35	80	160	310	200	50	20	10	**990**	57%	660 -	1,680
456	1,402	94	36	13	25	40	65	35	10	3	3	**230**	50%	150 -	450
147	615	16	15	5	10	9	7	3	1	0	0	**50**	34%	29 -	165
558	1,577	163													
733	2,318	175	60	15	30	45	70	50	25	15	10	**320**	44%	170 -	710

(9) Forecast point names based on USGS gage names. Stanislaus below Goodwin also known as inflow to New Melones, Tuolumne River below La Grange also known as inflow to Don Pedro, Merced River below Merced Falls also known as inflow to McClure.
(10) Coordinated Forecast by National Weather Service California-Nevada River Forecast Center and Department of Water Resources, State of California
* Unimpaired runoff in months prior to forecast date are based on measured flows

MARCH 1, 2013 FORECASTS
APRIL-JULY UNIMPAIRED RUNOFF

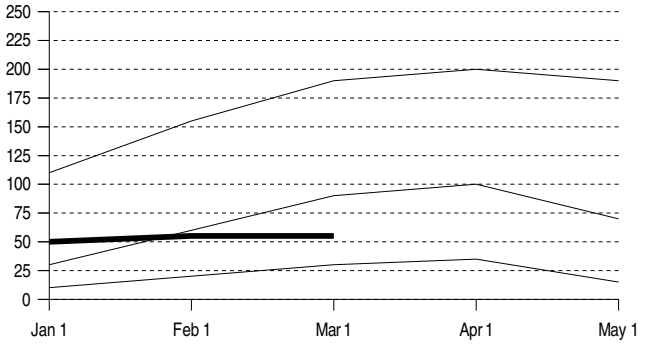
HYDROLOGIC REGION and Watershed	Apr-Jul Unimpaired Runoff in 1,000 Acre-Feet (1) HISTORICAL 50 Yr Avg (2)	Max of Record	Min of Record	FORECAST Apr-Jul Forecasts	Pct of Avg
NORTH COAST					
Scott River					
Scott River nr Ft Jones (3)	181	398	22	**110**	61%
Klamath River					
Total inflow to Upper Klamath Lake (4)	515	618	84	**390**	76%
NORTH LAHONTAN					
Truckee River					
Lake Tahoe to Farad accretions	256	713	52	**120**	47%
Lake Tahoe Rise (assuming gates closed, ft)	1.4	5.4	0.2	**0.6**	43%
Carson River					
West Fork Carson River at Woodfords	53	135	12	**35**	66%
East Fork Carson River near Gardnerville	186	407	43	**130**	70%
Walker River					
West Walker River below Little Walker, near Coleville	155	330	35	**105**	68%
East Walker River near Bridgeport	63	209	7	**31**	49%
SOUTH LAHONTAN					
Owens River					
Total tributary flow to Owens River (5)	235	579	96	**128**	55%

(1) See inside back cover for definition
(2) All 50 year averages are based on years 1961-2010 unless otherwise noted
(3) Forecast by National Weather Service California-Nevada River Forecast Center. 30 yr average (1971-2000)
(4) Forecast by U.S. Natural Resources Conservation Service and National Weather Service California-Nevada River Forecast Center, April through September forecast, 30 year average based on years 1971-2000.
(5) Forecast by Department of Water and Power, City of Los Angeles, average based on years 1961-2010
.

NORTH COAST REGION

Snowpack Accumulation

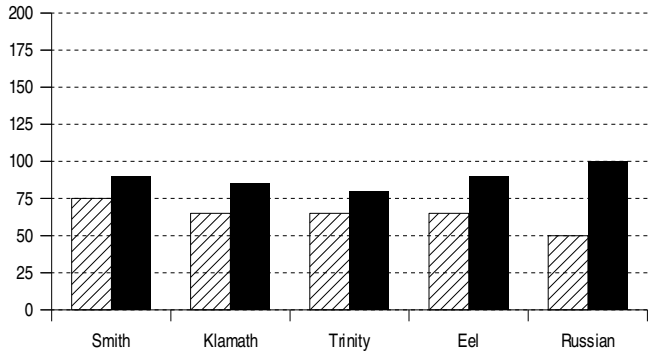
Water Content in % of April 1 Average



SNOWPACK- First off the month measurements made at 11 snow courses indicate an area wide snow water equivalent of 18 inches. This is 60 percent of the March 1 average and 55 percent of the seasonal (April 1) average. Last year at this time the pack was holding 11.6 inches of water.

Precipitation

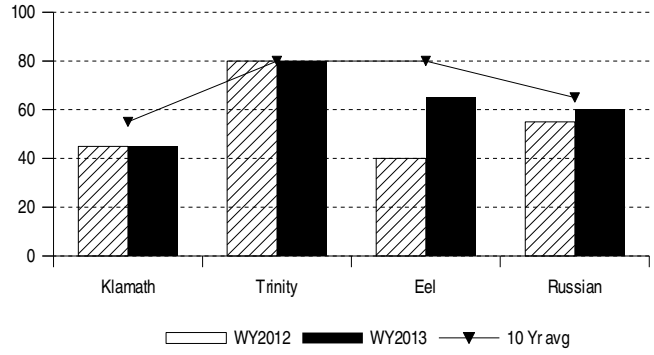
October 1 to date in % of Average



PRECIPITATION - Seasonal precipitation (October 1 through the end of last month) on this area was 90 percent of normal. Precipitation last month was about 25 percent of the monthly average. Seasonal precipitation at this time last year stood at 65 percent of normal.

Reservoir Storage

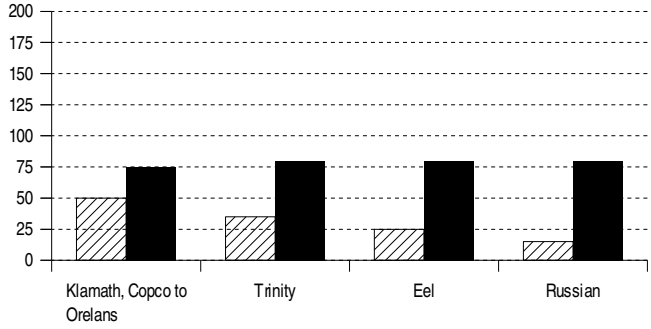
Contents of major reservoirs in % of capacity



RESERVOIR STORAGE- First of the month storage in 6 reservoirs was 2.4 million acre-feet which is 105 percent of average. About 75 percent of available capacity was being used. Storage in these reservoirs at this time last year was 105 percent of average.

Runoff

October 1 to date in % of average

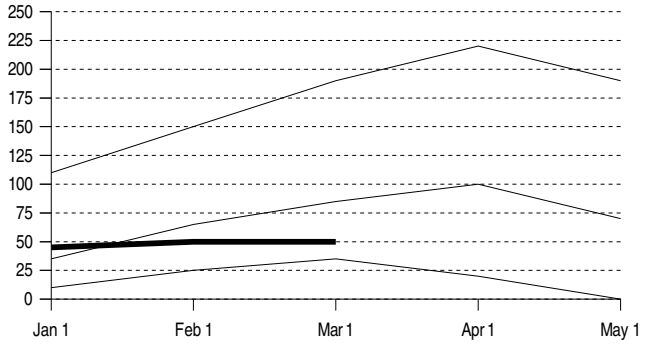


RUNOFF -Seasonal runoff of streams draining the area totaled 5.6 million acre-feet which is 75 percent of the average for this period. Last year, runoff for the same period was 30 percent of average.

SACRAMENTO RIVER REGION

Snowpack Accumulation

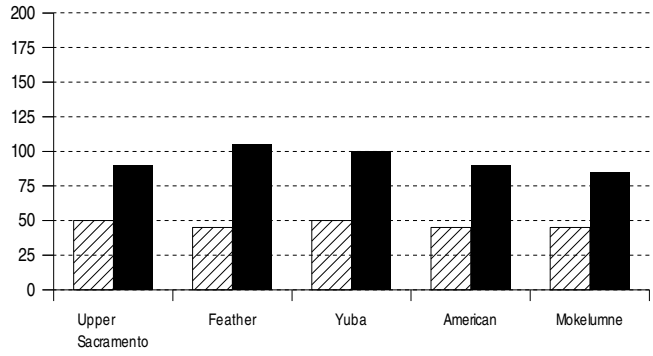
Water Content in % of April 1 Average



SNOWPACK- First of the month measurements made at 70 snow courses indicate an area wide snow water equivalent of 15.9 inches. This is 60 percent of the March 1 average and 50 percent of the seasonal (April 1) average. Last year at this time the pack was holding 7.8 inches of water.

Precipitation

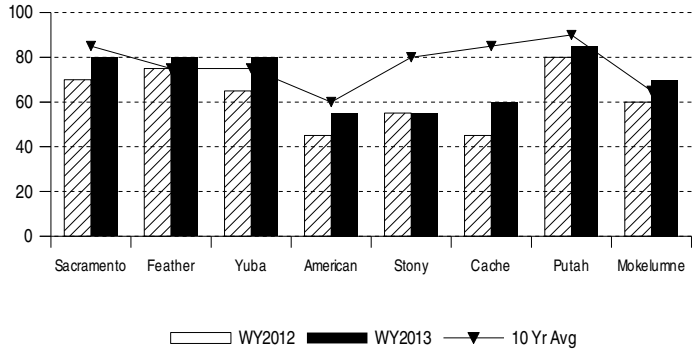
October 1 to date in % of Average



PRECIPITATION - Seasonal precipitation (October 1 through the end of last month) on this area was 95 percent of normal. Precipitation last month was about 10 percent of the monthly average. Seasonal precipitation at this time last year stood at 50 percent of normal.

Reservoir Storage

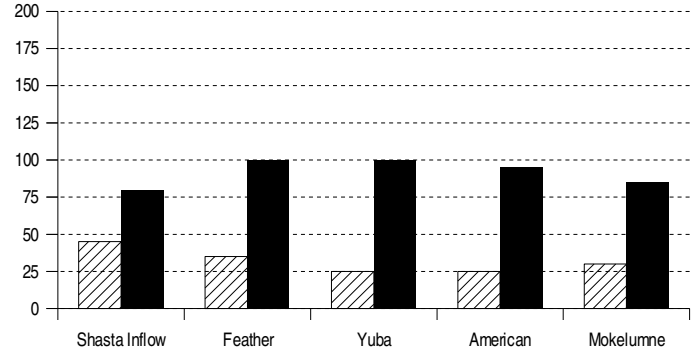
Contents of major reservoirs in % of capacity



RESERVOIR STORAGE- First of the month storage in 43 reservoirs was 12.2 million acre-feet which is 110 percent of average. About 75 percent of available capacity was being used. Storage in these reservoirs at this time last year was 95 percent of average.

Runoff

October 1 to date in % of average

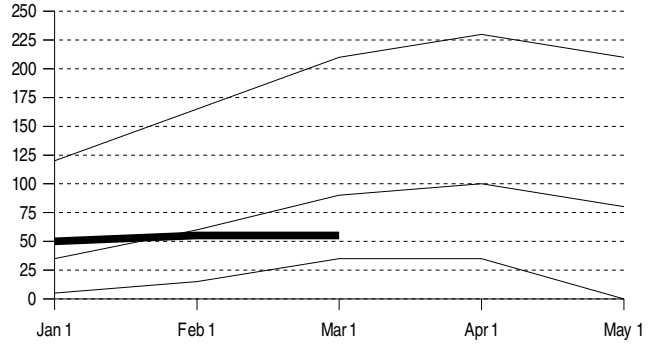


RUNOFF - Seasonal runoff of streams draining the area totaled 6.8 million acre-feet which is 85 percent of average for this period. Last year, runoff for the same period was 35 percent of average.

The **Sacramento Region 40-30-30 Water Supply Index** is forecast to be 6.4 assuming median meteorological conditions for the remainder of the year. This classifies the year as "dry" in the Sacramento Valley according to the State Water Resources Control Board.

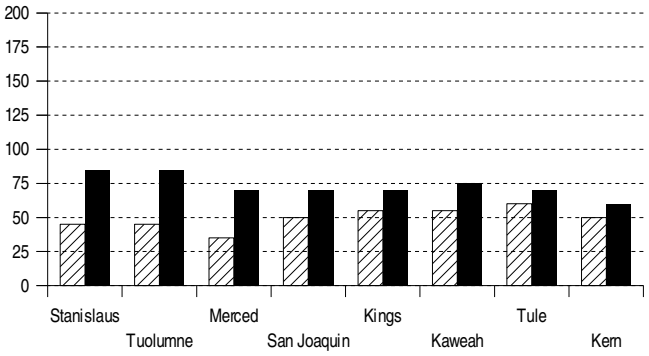
Snowpack Accumulation

Water Content in % of April 1 Average



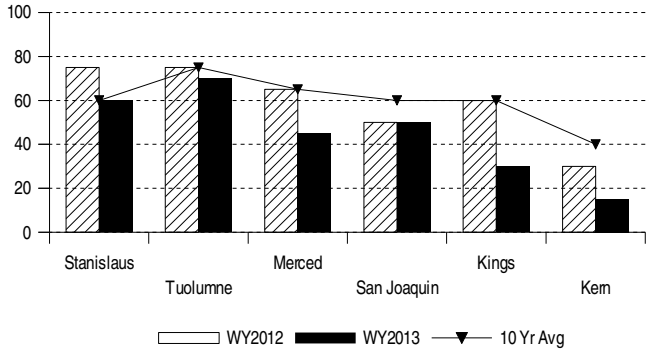
Precipitation

October 1 to date in % of Average



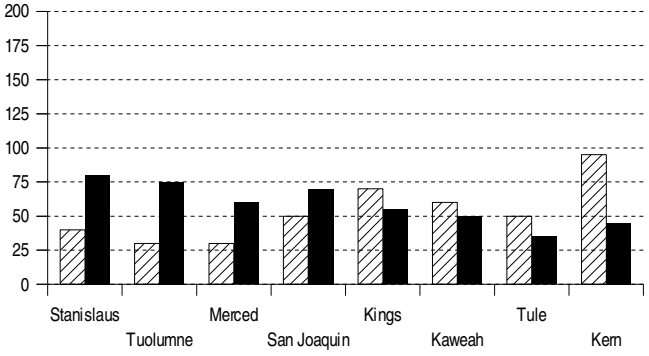
Reservoir Storage

Contents of major reservoirs in % of capacity



Runoff

October 1 to date in % of average



SAN JOAQUIN RIVER AND TULARE LAKE REGIONS

SNOWPACK- First of the month measurements made at 63 **San Joaquin Region** snow courses indicate an area wide snow water equivalent of 18.9 inches. This is 65 percent of the March 1 average and 55 percent of seasonal (April 1) average. Last year at this time the pack was holding 7.5 inches of water. At the same time 41 **Tulare Lake Region** snow courses indicated a basin-wide snow water equivalent of 13.2 inches which is 60 percent of the average for March 1 and 55 percent of the seasonal average. Last year at this time the basin was holding 7.1 inches of water.

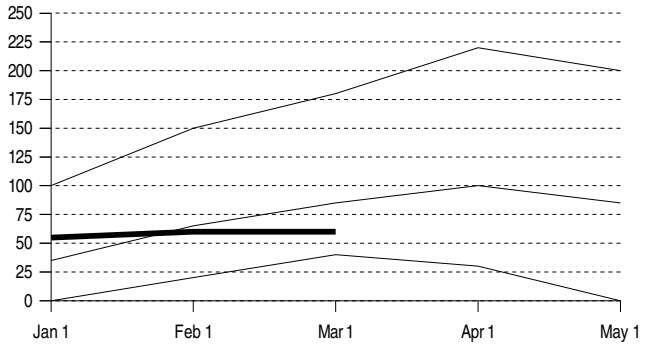
PRECIPITATION - Seasonal precipitation (October 1 through the end of last month) on the **San Joaquin Region** was 80 percent of normal. Precipitation last month was about 15 percent of the monthly average. Seasonal precipitation at this time last year stood at 45 percent of normal. Seasonal precipitation on the **Tulare Lake Region** was 65 percent of normal. Precipitation last month was about 35 percent of the monthly average. Seasonal precipitation at this time last year stood at 50 percent of normal.

RESERVOIR STORAGE- First of the month storage in 34 **San Joaquin Region** reservoirs was 7.0 million acre-feet which is 95 percent of average. About 60 percent of available capacity was being used. Storage at this time last year was 115 percent of average. First of the month storage in 6 **Tulare Lake Region** reservoirs was 535 thousand acre-feet which is 65 percent of average and about 25 percent of available capacity. Storage at this time last year was 115 percent of average.

RUNOFF- Seasonal runoff of streams draining the **San Joaquin Region** totaled 12.4 million acre-feet which is 75 percent of average for this period. Last year, runoff for the same period was 35 percent of average. Seasonal runoff of streams draining the **Tulare Lake Basin** totaled 303 thousand acre-feet which is 50 percent of average for this period. Last year runoff for this same period was 70 percent of average. The **San Joaquin Region 60-20-20 Water Supply Index** is forecast to be 1.9 assuming 75 percent meteorological conditions. This classifies the year as "critical" in the San Joaquin Region according to the State Water Resources Control Board.

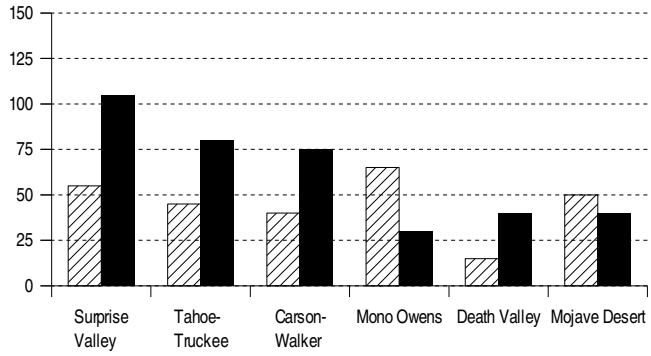
Snowpack Accumulation

Water Content in % of April 1 Average



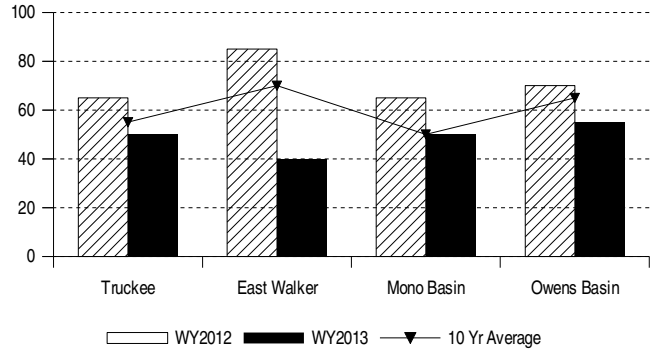
Precipitation

October 1 to date in % of Average



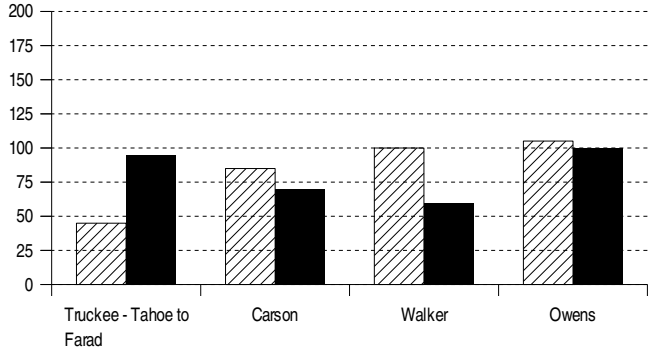
Reservoir Storage

Contents of major reservoirs in % of capacity



Runoff

October 1 to date in % of average



NORTH AND SOUTH LAHONTAN REGIONS

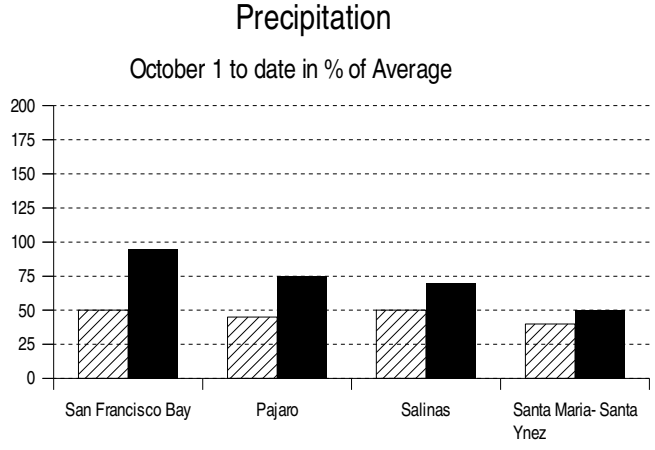
SNOWPACK- First of the month measurements made at 10 **North Lahontan snow** courses indicate an area wide snow water equivalent of 13.9 inches. This is 70 percent of the March 1 average and 60 percent of seasonal (April 1) average. Last year at this time the pack was holding 8.5 inches of water. At the same time 17 **South Lahontan Region** snow courses indicated a basin-wide snow water equivalent of 13.9 inches which is 70 percent of the average for March 1 and 60 percent of the seasonal average. Last year at this time the basin was holding 6.2 inches of water.

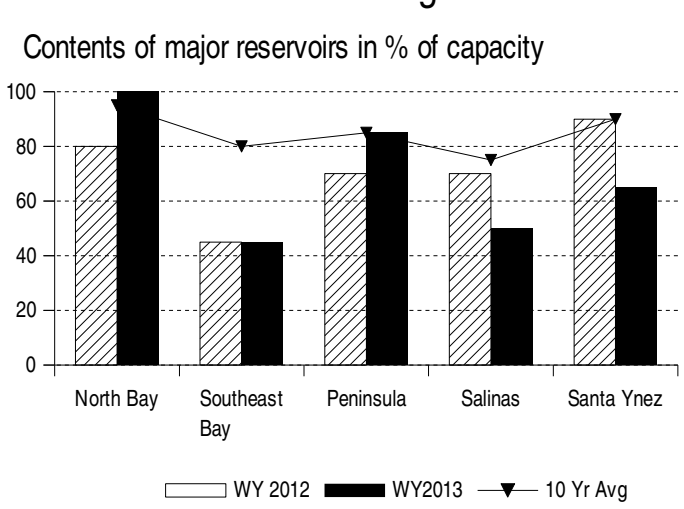
PRECIPITATION - Seasonal precipitation (October 1 through the end of last month) on the **North Lahontan** was 85 percent of normal. Precipitation last month was about 15 percent of the monthly average. Seasonal precipitation at this time last year stood at 45 percent of normal. Seasonal precipitation on the **South Lahontan** was 35 percent of normal. Precipitation last month was about 10 percent of the monthly average. Seasonal precipitation at this time last year stood at 40 percent of normal.

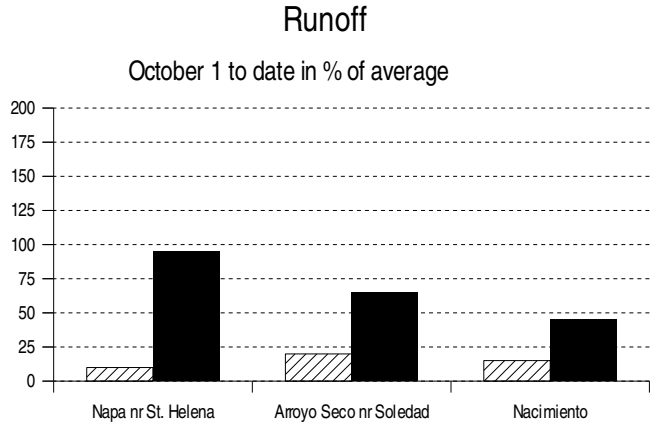
RESERVOIR STORAGE- First of the month storage in 5 **North Lahontan** reservoirs was 557 thousand acre-feet which is 105 percent of average. About 50 percent of available capacity was being used. Storage in these reservoirs at this time last year was 135 percent of average. Lake Tahoe was 2.85 feet above its natural rim on March 1. First of the month storage in 8 **South Lahontan** reservoirs was 249 thousand acre-feet which is 95 percent of average and about 60 percent of available capacity. Storage in these reservoirs at this time last year was 110 percent of average.

RUNOFF- Seasonal runoff of streams draining the **North Lahontan Region** totaled 163 thousand acre-feet which is 80 percent of average for this period. Last year, runoff for the same period was 70 percent of average. Seasonal runoff of the Owens River in the **South Lahontan Region** totaled 54 thousand acre-feet which is 100 percent of average for this period. Last year runoff for this same period was at 125 percent of average.

SAN FRANCISCO BAY AND CENTRAL COAST REGIONS







PRECIPITATION - Seasonal precipitation (October 1 through the end of last month) on the **San Francisco Bay Region** was 95 percent of normal. Precipitation last month was about 15 percent of the monthly average. Seasonal precipitation at this time last year stood at 50 percent of normal.

Seasonal precipitation on the **Central Coast Region** was 65 percent of normal. Precipitation last month was about 10 percent of the monthly average. Seasonal precipitation at this time last year stood at 45 percent of normal.

RESERVOIR STORAGE- First of the month storage in 17 **San Francisco Bay Region** reservoirs was 448 thousand acre-feet which is 90 percent of average. About 65 percent of available capacity was being used. Storage in these reservoirs at this time last year was 85 percent of average.

First of the month storage in 6 **Central Coast Region** reservoirs was 543 thousand acre-feet which is 85 percent of average and about 55 percent of available capacity. Storage in these reservoirs at this time last year was 110 percent of average.

RUNOFF- Seasonal runoff of the Napa River in the **San Francisco Bay Region** totaled 49 thousand acre-feet which is 95 percent of average for this period. Last year, runoff for the same period was 10 percent of average.

Seasonal runoff of streams draining the **Central Coast Region** totaled 113 thousand acre-feet which is 55 percent of average for this period. Last year runoff for this same period was 20 percent of average.

SOUTH COAST AND COLORADO RIVER REGIONS

PRECIPITATION - October through February (seasonal) precipitation on the **South Coast Region** was 50 percent of normal. February precipitation was 20 percent of the monthly average. Seasonal precipitation at this time last year was 55 percent of normal. Seasonal precipitation on the **Colorado River-Desert Region** was 75 percent of normal and last year's seasonal precipitation on the **Colorado River-Desert Region** was 40 percent of normal. Precipitation in February was 10 percent of average.

RESERVOIR STORAGE - March 1 storage in 29 major **South Coast Region** reservoirs was 1.2 million acre-feet or 85 percent of average. About 60 percent of available capacity was being used. Storage in these reservoirs at this time last year was about 100 percent of average. On March 1 combined storage in Lakes Powell, Mead, Mohave and Havasu was about 27.9 million acre-feet or about 70 percent of average. About 55 percent of available capacity was in use. Last year at this time, these reservoirs were storing about 32.6 million acre-feet.

RUNOFF - Seasonal runoff from selected **South Coast Region** streams totaled 7 thousand acre-feet which is 25 percent of average. Seasonal runoff from these streams last year was 30 percent of average.

COLORADO RIVER - The April -July inflow to Lake Powell is forecast to be 3.4 million acre-feet, which is 47 percent of average. The March 1 snowpack was 80 percent, highest in the Escalante basin at 95 percent of average and lowest on the Duchesne at 80 percent.

MAJOR WATER DISTRIBUTION PROJECTS

RESERVOIR STORAGE

(AVERAGES BASED ON 1951-2000 OR PERIOD RECORD)

RESERVOIR	CAPACITY 1,000 AF	AVERAGE STORAGE 1,000 AF	STORAGE AT END OF February 2012 1,000 AF	2013 1,000 AF	PERCENT AVERAGE	PERCENT CAPACITY
STATE WATER PROJECT						
Lake Oroville	3,538	2,466	2,520	2,848	116%	81%
San Luis Reservoir (SWP)	1,062	935	974	461	49%	43%
Lake Del Valle	77	35	29	36	105%	47%
Lake Silverwood	73	66	71	71	107%	98%
Pyramid Lake	171	162	166	167	103%	98%
Castaic Lake	325	281	290	285	101%	88%
Perris Lake	132	110	74	72	65%	55%
CENTRAL VALLEY PROJECT						
Trinity Lake	2,448	1,816	1,960	1,986	109%	81%
Lake Shasta	4,552	3,326	3,169	3,611	109%	79%
Whiskeytown Lake	241	207	205	205	99%	85%
Folsom Lake	977	543	387	552	102%	57%
New Melones Reservoir	2,420	1,468	1,965	1,600	109%	66%
Millerton Lake	520	341	290	325	95%	62%
San Luis Reservoir (CVP)	971	803	748	760	95%	78%
COLORADO RIVER PROJECT						
Lake Mead	26,159	19,788	14,907	13,810	70%	53%
Lake Powell	24,322	17,340	15,453	11,891	69%	49%
Lake Mohave	1,810	1,675	1,650	1,666	99%	92%
Lake Havasu	619	550	563	582	106%	94%
EAST BAY MUNICIPAL UTILITY DISTRICT						
Pardee Res	198	180	167	166	92%	84%
Camanche Reservoir	417	252	241	336	134%	81%
East Bay (4 res.)	147	131	127	122	93%	83%
CITY AND COUNTY OF SAN FRANCISCO						
Hetch-Hetchy Reservoir	360	158	274	250	158%	69%
Cherry Lake	268	140	254	240	171%	90%
Lake Eleanor	26	10	16	21	210%	81%
South Bay/Peninsula (4 res.)	225	170	120	127	74%	56%
CITY OF LOS ANGELES (D.W.P.)						
Lake Crowley	183	127	143	103	82%	56%
Grant Lake	48	27	38	32	117%	67%
Other Aqueduct Storage (6 res.)	83	75	--	54	72%	65%

TELEMETERED SNOW WATER EQUIVALENTS

March 1, 2013

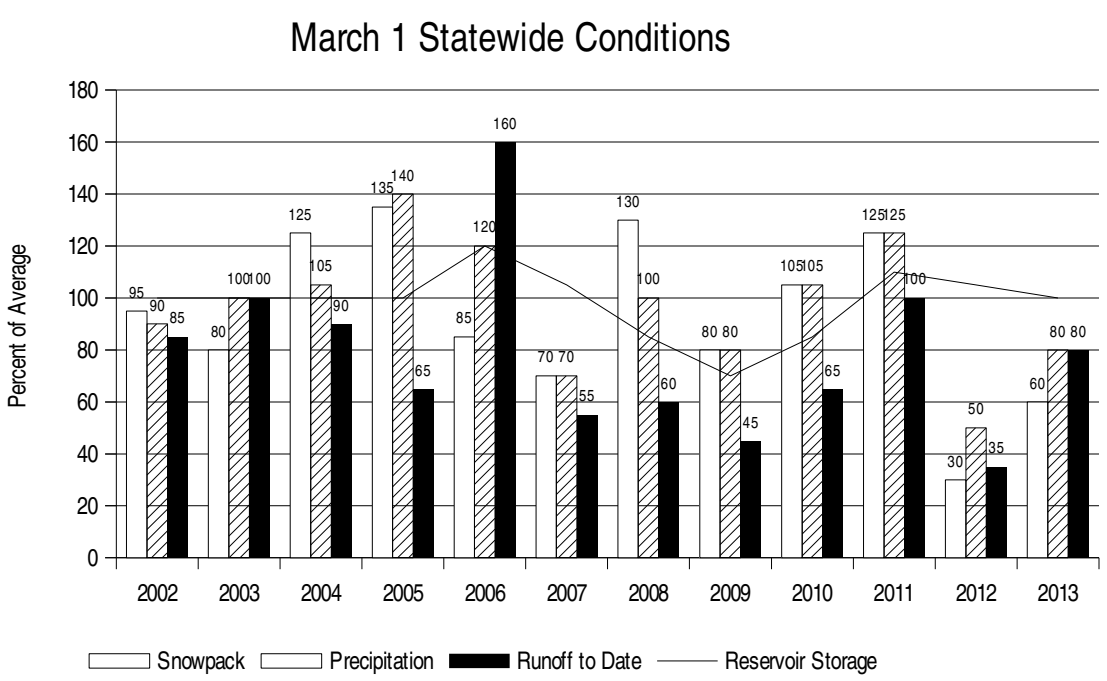
(AVERAGES BASED ON PERIOD RECORD)

BASIN NAME / STATION NAME	ELEV	APRIL 1 AVERAGE	INCHES OF WATER EQUIVALENT Mar 1	PERCENT OF AVERAGE	24 HRS PREVIOUS	1 WEEK PREVIOUS
TRINITY RIVER						
Peterson Flat	7150’	29.2	21.1	72.3	21.5	21.2
Red Rock Mountain	6700’	39.6	29.8	75.1	29.8	30.0
Bonanza King	6450’	40.5	16.1	39.7	16.0	16.0
Shimmy Lake	6400’	40.3	—	—	—	—
Middle Boulder 3	6200’	28.3	18.3	64.6	18.1	17.9
Highland Lakes	6030’	29.9	11.9	39.7	12.5	13.3
Scott Mountain	5900’	16.0	13.1	81.8	13.6	13.3
Mumbo Basin	5650’	22.4	10.6	47.1	10.9	10.1
Big Flat	5100’	15.8	11.8	74.4	12.0	11.8
Crowder Flat	5100’	—	4.3	—	4.1	4.0
SACRAMENTO RIVER						
Cedar Pass	7100’	18.1	—	—	—	—
Blacks Mountain	7050’	12.7	8.0	63.3	8.3	8.4
Sand Flat	6750’	42.4	20.8	49.0	20.8	21.0
Medicine Lake	6700’	32.6	26.6	81.7	26.9	26.3
Adin Mountain	6200’	13.6	8.1	59.6	8.1	8.0
Snow Mountain	5950’	27.0	17.6	65.3	17.8	17.9
Slate Creek	5700’	29.0	12.7	43.9	12.4	12.2
Stouts Meadow	5400’	36.0	16.7	46.4	16.8	16.8
FEATHER RIVER						
Lower Lassen Peak	8250’	—	—	—	—	—
Kettle Rock	7300’	25.5	16.4	64.5	15.2	15.7
Grizzly Ridge	6900’	29.7	15.1	50.9	15.5	15.0
Pilot Peak	6800’	52.6	—	—	—	—
Gold Lake	6750’	36.5	25.2	69.0	25.2	25.2
Humbug	6500’	28.0	23.0	82.3	23.3	22.2
Harkness Flat	6200’	28.5	12.8	44.7	13.3	12.7
Rattlesnake	6100’	14.0	12.6	90.0	12.8	12.5
Bucks Lake	5750’	44.7	24.2	54.2	24.6	23.6
Four Trees	5150’	20.0	20.2	100.8	20.4	20.8
EEL RIVER						
Noel Spring	5100’	—	3.9	—	3.7	5.4
Hull Mountain	6461’	—	—	—	—	—
YUBA & AMERICAN RIVERS						
Lake Lois	8600’	39.5	23.9	60.4	24.1	22.7
Schneiders	8750’	34.5	30.7	89.1	30.6	31.4
Carson Pass	8353’	—	24.2	—	23.9	23.9
Caples Lake	8000’	30.9	19.7	63.7	20.0	21.1
Alpha	7600’	35.9	15.8	44.0	15.5	14.6
Forni Ridge	7600’	37.0	18.8	50.9	19.4	18.9
Meadow Lake	7200’	55.5	35.8	64.4	35.9	35.6
Silver Lake	7100’	22.7	13.7	60.3	13.9	13.3
Central Sierra Snow Lab	6900’	33.6	18.6	55.4	18.4	19.4
Huysink	6600’	42.6	—	—	—	—
Van Vleck	6700’	35.9	19.7	54.8	19.4	19.2
Robinson Cow Camp	6480’	—	19.6	—	19.8	19.1
Robbs Saddle	5900’	21.4	9.9	46.2	10.2	9.9
Greek Store	5600’	21.0	12.8	61.1	12.5	13.1
Blue Canyon	5280’	9.0	6.4	70.9	7.0	7.4
Robbs Powerhouse	5150’	5.2	—	—	—	—
MOKELUMNE & STANISLAUS RIVERS						
Deadman Creek	9250’	37.2	20.8	55.8	20.6	20.6
Highland Meadow	8700’	47.9	34.6	72.2	34.4	33.9
Gianelli Meadow	8400’	55.5	28.9	52.1	28.9	29.2
Lower Relief Valley	8100’	41.2	21.8	52.8	21.7	22.8
Blue Lakes	8000’	33.1	18.9	57.1	18.6	18.2
Stanislaus Meadow	7750’	47.5	25.0	52.5	24.8	25.0
Bloods Creek	7200’	35.5	11.8	33.1	11.6	11.5
Black Springs	6500’	32.0	9.4	29.5	9.4	9.1
TUOLUMNE & MERCED RIVERS						
Dana Meadows	9800’	27.7	17.2	62.1	17.1	17.2
Slide Canyon	9200’	41.1	—	—	—	—
Lake Tenaya	8150’	33.1	19.5	58.9	19.5	19.9
Tuolumne Meadows	8600’	22.6	—	—	—	—
Horse Meadow	8400’	48.6	38.7	79.7	40.0	39.8
Ostrander Lake	8200’	34.8	—	—	—	—
White Wolf	7900’	—	19.6	—	19.8	19.7
Paradise Meadow	7650’	41.3	29.5	71.4	29.8	30.1
Gin Flat	7050’	34.2	13.0	37.9	13.0	12.5
Lower Kibbie Ridge	6700’	27.4	7.9	28.9	7.9	8.3

SAN JOAQUIN RIVER						
Volcanic Knob	10050’	30.1	16.3	54.3	16.2	15.5
Agnew Pass	9450’	32.3	16.1	49.7	17.1	17.4
Kaiser Point	9200’	37.8	23.7	62.7	23.7	23.6
Green Mountain	7900’	30.8	17.8	57.7	17.8	18.1
Devil’s Postpile	7569’	—	—	—	—	—
Tamarack Summit	7550’	30.5	9.9	32.6	9.9	10.3
Chilkoot Meadow	7150’	38.0	18.4	48.3	18.6	18.1
Huntington Lake	7000’	20.1	8.6	43.0	8.6	8.6
Graveyard Meadow	6900’	18.8	8.5	45.3	9.5	9.1
Poison Ridge	6900’	28.9	11.3	39.0	10.8	10.8
KINGS RIVER						
Bishop Pass	11200’	34.0	16.8	49.5	16.8	16.7
Charlotte Lake	10400’	27.5	17.8	64.8	17.3	17.1
State Lakes	10300’	29.0	19.1	65.9	19.1	18.9
Mitchell Meadow	9900’	32.9	18.9	57.4	18.9	18.9
Blackcap Basin	10300’	34.3	—	—	—	—
Upper Burnt Corral	9700’	34.6	20.7	59.9	20.7	21.0
West Woodchuck Meadow	9100’	32.8	18.9	57.6	19.9	19.1
Big Meadows	7600’	25.9	—	—	—	—
KAWEAH & TULE RIVERS						
Farewell Gap	9500’	34.5	—	—	—	—
Quaking Aspen	7200’	21.0	10.0	47.8	10.0	10.9
Giant Forest	6650’	10.0	4.1	41.0	4.2	3.8
KERN RIVER						
Upper Tyndall Creek	11400’	27.7	12.4	44.8	12.4	12.3
Crabtree Meadow	10700’	19.8	9.8	49.5	9.8	9.7
Chagoopa Plateau	10300’	21.8	12.7	58.2	12.6	12.9
Pascoes	9150’	24.9	11.7	47.0	11.7	11.7
Tunnel Guard Station	8900’	15.6	6.1	39.1	5.7	5.9
Wet Meadows	8950’	30.3	15.6	51.5	15.4	16.4
Casa Vieja Meadows	8300’	20.9	9.7	46.3	9.7	9.7
Beach Meadows	7650’	11.0	2.5	22.9	2.5	4.2
SURPRISE VALLEY AREA						
Dismal Swamp	7050’	29.2	19.5	66.8	19.4	18.3
TRUCKEE RIVER						
Independence Lake	8450’	41.4	34.0	82.1	34.1	34.3
Big Meadows	8700’	25.7	17.1	66.5	16.4	17.1
Squaw Valley	8200’	46.5	32.8	70.5	31.5	31.7
Independence Camp	7000’	21.8	7.1	32.6	7.2	7.4
Independence Creek	6500’	12.7	5.8	45.7	5.8	5.7
Truckee 2	6400’	14.3	10.2	71.3	9.9	10.0
LAKE TAHOE BASIN						
Mount Rose Ski Area	8900’	38.5	29.5	76.6	29.3	29.4
Heavenly Valley	8800’	28.1	15.3	54.4	15.1	15.2
Hagans Meadow	8000’	16.5	9.3	56.4	8.9	9.4
Marlette Lake	8000’	21.1	13.8	65.4	13.4	13.3
Echo Peak 5	7800’	39.5	29.6	74.9	29.2	29.3
Rubicon Peak 2	7500’	29.1	11.2	38.5	11.4	12.9
Tahoe City Cross	6750’	16.0	3.9	24.4	5.1	4.9
Ward Creek 3	6750’	39.4	18.5	47.0	19.7	18.9
Fallen Leaf Lake	6250’	7.0	6.1	87.1	6.1	6.1
CARSON RIVER						
Ebbetts Pass	8700’	38.8	23.9	61.6	22.9	23.1
Horse Meadow	8557’	—	12.3	—	12.3	12.6
Burnside Lake	8129’	—	18.8	—	18.3	18.6
Forestdale Creek	8017’	—	23.9	—	23.4	23.8
Poison Flat	7900’	16.2	—	—	—	—
Monitor Pass	8350’	—	11.6	—	11.3	11.1
Spratt Creek	6150’	4.5	5.2	115.6	5.1	4.6
WALKER RIVER						
Leavitt Lake	9600’	—	42.0	—	42.0	41.8
Summit Meadow	9313’	—	13.0	—	12.9	12.8
Virginia Lakes	9300’	20.3	10.1	49.8	10.1	10.1
Lobdell Lake	9200’	17.3	11.0	63.6	10.9	10.9
Sonora Pass Bridge	8750’	26.0	17.2	66.2	17.2	17.3
Leavitt Meadows	7200’	8.0	6.1	76.2	6.3	5.9
OWENS RIVER/MONO LAKE						
Gem Pass	10750’	31.7	16.0	50.5	16.0	16.4
Sawmill	10200’	19.4	7.6	39.1	7.5	7.9
Cottonwood Lakes	10150’	11.6	5.3	46.1	5.2	6.1
Big Pine Creek	9800’	17.9	8.2	45.6	8.2	8.3
South Lake	9600’	16.0	8.9	55.5	9.0	9.0
Mammoth Pass	9300’	42.4	—	—	—	—
Rock Creek Lakes	9700’	14.0	—	—	—	—

NORMAL SNOWPACK ACCUMULATION EXPRESSED AS A PERCENT OF APRIL 1ST AVERAGE

AREA	JANUARY	FEBRUARY	MARCH	APRIL	MAY
Central Valley North	45%	70%	90%	100%	75%
Central Valley South	45%	65%	85%	100%	80%
North Coast	40%	60%	85%	100%	80%



SNOWLINES

The 81st Western Snow Conference (WSC) annual meeting will be held in Jackson Hole, Wyoming, April 15-18, 2013. The theme for this year's conference is "Wild Weather in the Wild West". On Monday, April 15th, the topic will be "New Strategies and Techniques in Long Range Streamflow Forecasting". Tuesday and Wednesday will include topics such as climate variability, water management, water supply forecasting, and modeling. Thursday activities will include a tour of natural resource management facilities in the Jackson Hole area. Don't miss out on an opportunity to attend this meeting of the premier organization devoted to the study of snow and runoff. Further information is at http://www.westernsnowconference.org/ or contact Frank Gehrke 916-574-2635.

Depicted on this months cover is one of the Departments snow gaugers ascending Kearsarge Pass en-route to a snow survey. Photo by Pat Armstrong.